

IN THE CLAIMS

Please amend claims 1, 2, 8, 10-19, 21-24, 27, 30, 32-34 as follows:

1. (Amended) A method of conducting data compression, comprising:
- receiving multiple input data blocks for storage in a data storage subsystem;
- applying a predetermined compression process to the data blocks;
- evaluating application of the predetermined compression process according to a predetermined compression criteria; and
- if the compression fails to satisfy the predetermined compression criteria, ceasing [application of the predetermined compression process] compression for subsequent data blocks.
2. (Amended) The method of claim 1, the predetermined compression process being performed individually [to] on each of the received data blocks, the evaluating of application of the predetermined compression process according to a predetermined compression criteria comprising:
- selecting a group of the received data blocks in accordance with a predetermined selection criteria;
- for each data block in the selected group, determining a compression ratio between (1) the data block's size after application of the predetermined compression process, and (2) the data block's size prior to application of the predetermined compression process, and
- for the selected group of received data blocks, determining how many data blocks have a compression ratio greater than a first threshold; and

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if the number of data blocks having a compression ratio greater than the first threshold exceeds a second threshold, the compression satisfying the predetermined compression criteria.

1 3. (Unchanged) The method of claim 2, the selection of a group of the received data
2 blocks in accordance with a predetermined selection criteria comprising selection of data
3 blocks in a fixed window.

1 4. (Unchanged) The method of claim 2, the selection of a group of the received data
2 blocks in accordance with a predetermined selection criteria comprising selection of data
3 blocks in a running window.

1 5. (Unchanged) The method of claim 1, the evaluating of application of the
2 predetermined compression process according to a predetermined compression criteria
3 comprising:

4 selecting a group of received data blocks in accordance with a predetermined
5 selection criteria;

6 for all received data blocks in the selected group, determining an aggregate
7 compression ratio between (1) the aggregate size of the data blocks after
8 application of the predetermined compression process, and (2) the aggregate
9 size of the data blocks prior to application of the predetermined compression
10 process, and

11 determining whether the aggregate compression ratio exceeds a first threshold; and
12 if the aggregate compression ratio exceeds the first threshold, the compression
13 satisfying the predetermined compression criteria.

1 6. (Unchanged) The method of claim 5, the selection of a group of the received data
2 blocks in accordance with a predetermined selection criteria comprising selection of data
3 blocks in a fixed window.

1 7. (Unchanged) The method of claim 5, the selection of a group of the received data
2 blocks in accordance with a predetermined selection criteria comprising selection of data
3 blocks in a running window.

1 8. (Amended) The method of claim 1, wherein:
2 the predetermined compression process is performed individually [to] on each of the
3 received data blocks; and
4 the cessation of [application of the predetermined compression process] compression
5 comprises ceasing [application of the predetermined compression process]
6 compression until satisfaction of a predetermined skip criteria, and then
7 resuming application of the predetermined compression process.

1 9. (Unchanged) The method of claim 8, predetermined skip criteria comprising
2 expiration of predetermined time.

1 10. (Amended) The method of claim 9, the cessation of application of the predetermined
2 compression process further comprising:
3 storing uncompressed data items received during cessation of [the predetermined
4 compression process without compression according to the predetermined
5 compression process] compression.

1 11. (Amended) The method of claim 9, predetermined skip criteria comprising storage
2 of a predetermined number of uncompressed data items [without compression according to
the predetermined compression process].

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12. (Amended) A programmed product comprising signal-bearing media tangibly
embodying a program of machine-readable instructions executable by a digital processing
apparatus to perform a method for conducting data compression, said method comprising:

receiving multiple [input data blocks] records for storage in a data storage
subsystem;

[applying a predetermined compression process to the data blocks;]

compressing at least one of the data records;

evaluating [application of the predetermined compression process] the compression
performance according to a predetermined compression criteria; and

if the compression fails to satisfy the predetermined compression criteria, [ceasing
application of the predetermined compression process] terminating
compression of subsequent data records.

1 13. (Amended) The product of claim 12, the [predetermined compression process]
2 compressing being performed individually [to] on each of the received data [blocks] records,
3 the evaluating of [application of the predetermined compression process] the compression
4 performance according to a predetermined compression criteria comprising:

5 selecting a group of the received data [blocks] records in accordance with a
6 predetermined selection criteria;

7 for each data [blocks] record in the selected group, determining a compression ratio
8 between (1) the data [block's] record's size after [application of the
9 predetermined compression process] compressing, and (2) the data [block's]
10 record's size prior to [application of the predetermined compression process]
11 compressing, and

12 for the selected group of received data [blocks] records, determining how many data
13 [blocks] records have a compression ratio greater than a first threshold; and
14 if the number of data [blocks] records having a compression ratio greater than the
15 first threshold exceeds a second threshold, the compression performance
16 satisfying the predetermined compression criteria.

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14. (Amended) The product of claim 13, the selection of a group of the received data
2 [blocks] records in accordance with a predetermined selection criteria comprising selection
3 of data [blocks] records in a fixed window.

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15. (Amended) The product of claim 13, the selection of a group of the received data
2 [blocks] records in accordance with a predetermined selection criteria comprises selection
3 of data [blocks] records in a running window.

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10.¹⁰ (Amended) The product of claim ~~12~~, the evaluating of [application of the predetermined compression process] compression performance according to a predetermined compression criteria comprising:

4 selecting a group of received data [blocks] records in accordance with a predetermined selection criteria;

6 for all received data [blocks] records in the selected group, determining an aggregate compression ratio between (1) the aggregate size of the data [blocks] records after [application of the predetermined compression process] compressing, and (2) the aggregate size of the data [blocks] records prior to [application of the predetermined compression process] compressing, and

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11 determining whether the aggregate compression ratio exceeds a first threshold; and
12 if the aggregate compression ratio exceeds the first threshold, the compression
13 performance satisfying the predetermined compression criteria.

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17.¹⁴ (Amended) The product of claim ~~16~~, the selection of a group of the received data [blocks] records in accordance with a predetermined selection criteria comprising selection of data [blocks] records in a fixed window.

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18.¹⁴ (Amended) The product of claim ~~16~~, the selection of a group of the received data [blocks] records in accordance with a predetermined selection criteria comprising selection of data [blocks] records in a running window.

1 19. (Amended) The product of claim 12, wherein:
2 the [predetermined compression process] compression is performed individually [to]
3 on each of the received data [blocks] records; and
4 the [cessation of application of the predetermined compression process] termination
5 of compression for subsequent data records comprises [ceasing application
6 of the predetermined compression process] terminating compression until
7 satisfaction of a predetermined skip criteria, and then resuming [application
8 of the predetermined compression process] compression for subsequent data
9 records. C

1 20. (Unchanged) The product of claim 19, predetermined skip criteria comprising
2 expiration of a predetermined time.

1 21. (Amended) The product of claim 20, the termination of [application of the
2 predetermined compression process] compression for subsequent data records further
3 comprising:
4 storing uncompressed data [items] records received during [cessation of the
5 predetermined compression process without compression according to the
6 predetermined compression process] termination of compression. C

1 22. (Amended) The product of claim 20, the resumption of [application of the
2 predetermined compression process] compression after satisfaction of a predetermined skip
criteria comprising:

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4 compression of
5 subsequent data records after storage of a predetermined number of
6 uncompressed data [items] records [without compression according to the
7 predetermined compression process].

8 23. (Amended) A data storage subsystem, comprising:

9 a storage unit to store digital data blocks;

10 a storage controller, coupled to the storage unit, and programmed to conduct a data
compression process, the process comprising:

11 receiving multiple input data blocks for storage in a data storage subsystem;

12 applying a predetermined compression process to the data blocks;

evaluating application of the predetermined compression process according
to [a predetermined] user adjustable and programmable compression
criteria; and

if the compression fails to satisfy the predetermined compression criteria,

ceasing [application of the predetermined compression process]

compression of future data blocks.

1 24. (Amended) The subsystem of claim 23, the predetermined compression process being
23 performed individually [to] on each of the received data blocks, the evaluating of application
24 of the predetermined compression process according to a predetermined compression criteria
25 comprising:

5 selecting a group of the received data blocks in accordance with a predetermined
6 selection criteria;

7 for each data blocks in the select group, determining a compression ratio between (1)
8 the data block's size after application of the predetermined compression
9 process, and (2) the data block's size prior to application of the predetermined
10 compression process, and

11 for the selected group of received data blocks, determining how many data blocks
12 have a compression ratio greater than a first threshold; and

13 if the number of data blocks having a compression ratio greater than the first
14 threshold exceeds a second threshold, the compression satisfying the
15 [predetermined] user adjustable and programmable compression criteria.

1 25. (Unchanged) The subsystem of claim 24, the selection of a group of the received data
2 blocks in accordance with a predetermined selection criteria comprising selection of data
3 blocks in a fixed window.

1 26. (Unchanged) The subsystem of claim 24, the selection of a group of the received data
2 blocks in accordance with a predetermined selection criteria comprising selection of data
3 blocks in a running window.

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(Amended) The subsystem of claim 23, the evaluating of application of the predetermined compression process according to a predetermined compression criteria comprising:

selecting a group of received data blocks in accordance with a predetermined selection criteria;

for all received data blocks in the selected group, determining an aggregate compression ratio between (1) the aggregate size of the data blocks after application of the predetermined compression process, and (2) the aggregate size of the data blocks prior to application of the predetermined compression process, and

determining whether the aggregate compression ratio exceeds a first threshold; and if the aggregate compression ratio exceeds the first threshold, the compression satisfying the [predetermined] user adjustable and programmable compression criteria.

28. (Unchanged) The subsystem of claim 27, the selection of a group of the received data blocks in accordance with a predetermined selection criteria comprising selection of data blocks in a fixed window.

29. (Unchanged) The subsystem of claim 27, the selection of a group of the received data blocks in accordance with a predetermined selection criteria comprising selection of data blocks in a running window.

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1 30. (Amended) The subsystem of claim 23, wherein:
2 the predetermined compression process is performed individually [to] on each of the
3 received data blocks; and
4 the cessation of [application of the predetermined compression process] compression
5 comprises ceasing [application of the predetermined compression process]
6 compression until satisfaction of a predetermined skip criteria, and then
7 resuming application of the predetermined compression process.

1 31. (Unchanged) The subsystem of claim 30, predetermined skip criteria comprising
2 expiration of a predetermined time.

1 32. (Amended) The subsystem of claim 31, the termination of application of the
2 predetermined compression process further comprising:
3 storing uncompressed data items received during cessation of [the predetermined
4 compression process without compression according to the predetermined
5 compression process] compression.
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1 33. (Amended) The subsystem of claim 31, the resumption of application of the
2 predetermined compression process after satisfaction of a predetermined skip criteria
3 comprising:
4 resuming application of the predetermined compression process after storage of a
5 predetermined number of uncompressed data items [without compression
6 according to the predetermined compression process].

1 34. (Amended) A data storage subsystem, comprising:
2 storage means to store digital data blocks;
3 storage controller means, coupled to the storage unit, for conducting data
4 compression process by:
5 receiving multiple input data blocks for storage in a data storage subsystem;
6 applying a predetermined compression process to the data blocks;
7 evaluating application of the predetermined compression process according
8 to a predetermined compression criteria; [and]
9 if the compression fails to satisfy the predetermined compression criteria,
10 ceasing [application of the predetermined compression process]
11 compression of subsequent data blocks;
12 wherein the predetermined compression process is performed individually to
13 each of the received data blocks, and the evaluating of application of
14 the predetermined compression process according to a predetermined
15 compression criteria comprises:
16 selecting a group of the received data blocks in accordance with a
17 predetermined selection criteria;
18 for each data block in the selected group, determining a compression ratio
19 between (1) the data block's size after application of the
20 predetermined compression process, and (2) the data block's size
21 prior to application of the predetermined compression process;
22 for the selected group of received data blocks, determining how many data
23 blocks have a compression ratio greater than a first threshold; and
24 if the number of data blocks having a compression ratio greater than the first
25 threshold exceeds a second threshold, the compression satisfying the
predetermined compression criteria.